



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith*

Date: April 4, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on April 4, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:00 am and ending at 3:35 p.m. Weather conditions were mostly sunny, and temperatures ranged from 56°F in the morning to 69°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the south bank, pouring concrete for the electrical trench at the pump house, installing new light fixtures and wiring, installing the finished east fence, erecting scaffolding for curbs along Admiralty Way, compacting the northeast corner plaza base fill, compacting the new DG (decomposed granite) path at the top of the south bank, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:00 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open; however no one is on site. A County truck is seen leaving the parking lot. The biological monitor personally locked the gate on Saturday; therefore, County staff must have opened the gate. The gate should be closed when leaving the site.

6:15 am. The initial biological survey begins as crews begin arriving at the staging area. One great blue heron flies in from the southwest and lands at the north mudflat. One dark-eyed junco and two house sparrows call from vegetation on the west bank. One black-crowned night heron stands on

the gabion peninsula near the tide gates. Four house finches and one northern mockingbird are observed in palms along Washington Boulevard. Two American coots swim near the northwest peninsula, and a killdeer is observed on its nest nearby. The occasional western gull flyover is observed, and frequent American crow and rock pigeon activity is observed along Admiralty Way. One great egret stands on the shoreline of the northeast peninsula. Two mallards sit on the stormwater inlet, and two gadwall swim in the East Basin. Two European starlings and two lesser goldfinches are observed in trees near the northeast corner of the site. One house wren, two American crows, two Anna's hummingbirds, and six bushtits are observed in trees along the bike path. Three American crows, including two at active nests, one Townsend's warbler, one dark-eyed junco, and two house finches are observed in trees near the pump house. One black-crowned night heron and one mourning dove are observed along the southeast channel. One snowy egret, two dark-eyed juncos and one black phoebe are observed along the south bank. One double-crested cormorant circles the West Basin before leaving the site to the northwest. The Allen's hummingbird nest in the middle of the three tide gate pines is unoccupied; however, a female Allen's hummingbird hovers nearby. Water levels are high and cover 75 percent of the mudflats, with waters reaching the silt fence in many areas.

6:45 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting killdeer and Allen's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. All 12 crew members present sign the sign-in sheet. Two ring-billed gulls fly over the site, and two tree swallows circle above the staging area. One great blue heron flies low over the construction trailer and lands at the tide gates.

7:00 am. Work begins as a crew begins planting near the south bank pines. Two double-crested cormorants fly over the West Basin before leaving the site to the northwest. Two black-crowned night herons, one adult and one juvenile, are observed on the gabion peninsula.

7:15 am. Fence installation begins along the bike path on the east bank. Three Eurasian collared doves fly over the Central Basin. One dark-eyed junco hops along the east bank, and one common yellowthroat is observed in trees along the bike path. Two mallards walk along the east shoreline.

7:30 am. Concrete crews remove old scaffolding for new curb along the DG path in the southeast corner along the bike path. They then install new scaffolding for the DG path curb along Admiralty Way at Marina City Drive. One great egret forages in the southeast channel, roughly 75 feet from the concrete crews. One Anna's hummingbird hovers over the southeast channel.

7:50 am. Electrical crews remove scaffolding from around light fixture bases in the southeast corner along the bike path. Two orange-crowned warblers and two dark-eyed juncos are observed in trees near the pump house. Nearby, crows frequently leave their nests in trees along the bike path to forage for nest materials and food. Two song sparrows are observed in trees outside of the southeast corner in Yvonne Burke Park.

8:15 am. One Caspian tern flies east above Admiralty Way before turning south towards the marina. One Allen's hummingbird hovers and darts above the East Basin. Two gadwall leave the site to the northwest.

8:35 am. The biological monitor conducts a quick planting survey. Large areas that still need to be planted include the boat ramp area, south bank and southeast channel along Admiralty Way, and the west bank. There is very little observed mortality or wilting in planted individuals; most are flowering or sending out new shoots. In some areas along the gabion peninsula and silt fence, the pickleweed is not flourishing. The pickleweed requires consistent water level fluctuations to succeed.

8:55 am. One crew member begins compacting fill in the northeast corner plaza. One double-crested cormorant lands on the stormwater inlet. Two mourning doves land on the bank in the northeast corner. No killdeer adult is at the nest. It is possible this killdeer pair are first-time parents because of the staggered laying of the eggs and the inconsistent incubation.

9:15 am. One crew member waters the potted plants staged on the west bank. One male gadwall lands in the East Basin. A second pair of mallards lands in the West Basin. Fish are observed surfacing frequently throughout the Basin.

9:35 am. A crew sweeps and cleans the staging area. Another crew closes one lane of Admiralty Way. The ducks and wading birds in the Basin are all sleeping or preening. A group of 10 California gulls fly east over Washington Boulevard; otherwise, gull activity is largely infrequent western gull observations. Three house finches and two European starlings perch on power poles above the north bank. One black-crowned night heron lands at the stormwater inlet. Two barn swallows circle the West Basin.

10:00 am. A crew uses the large front loader to consolidate soil piles in the staging area. A second crew loads potted plants from the west bank onto a tractor to take them to be planted along the south bank. Two house sparrows and three house finches fly about the staging area. Two tree swallows land on the west bank and collect nest materials before flying towards the marina. The Allen's hummingbird nest is unoccupied, but is in good condition.

10:20 am. Crews compact the new DG path along Admiralty Way. One double-crested cormorant catches a large fish in the Central Basin. One American crow locates the killdeer nest and quickly carries off an egg. The adult killdeer rush in when the crow comes back for a second egg. The killdeer pair dive at the crow to keep it away from the remaining two eggs. The commotion attracts three more American crows, and the remaining two eggs are carried off. The killdeer nest has been predated on by American crows and is no longer active.

10:40 am. The electric crew digs a narrow trench at the top of bank along Admiralty Way for wiring to light nearby fixtures. One lesser goldfinch forages on newly installed plants along the east bank. One yellow-rumped warbler forages in trees near the pump house. Two Anna's hummingbirds fly in and out of the eucalyptus trees along the bike path. One monarch flies along the southeast channel towards the Basin. The nest in the ficus just outside the southeast gate, which was previously identified in the May 2015 pre-construction nest survey, is in good condition but appears to be inactive.

11:00 am. The concrete crew installs rebar and scaffolding at the northeast corner plaza. One snowy egret lands at the stormwater inlet. Three bushtits and one common yellowthroat are observed in trees near the pump house. The killdeer nest is inspected closely, and it is confirmed that all three eggs are gone.

11:20 am. A cement truck arrives at the staging area. Significant American crow activity is observed with 13 individuals flying about the Basin. One double-crested cormorant leaves the Basin to the northwest. One belted kingfisher perches on a powerline above the stormwater inlet. Some planted grasses in heavily-trafficked areas along the top of the east bank are trampled and/or stunted.

11:40 am. Planting on the south bank stops as crew members are dispatched to assist with other tasks. The cement truck moves into place at the southeast gate. Using a tractor, concrete is placed in the electrical trench at the pump house. One Anna's hummingbird perches on the east fence, and one monarch butterfly flies around the pump house.

12:00 pm. Work ends at the electrical trench at the pump house, and the concrete truck heads to the staging area to wash out. Trash (i.e. mostly plastics) collect in slack-water areas of the Basin (e.g. southeast channel). The construction superintendent is notified of the issue. One American coot forages in the southeast channel; the second coot has not been observed since the morning survey. One great blue heron flies in from the southeast and lands on the gabion peninsula.

12:20 pm. Most of the construction crew members and the biological monitor take lunch. However, the fence crew continues to work installing the east fence along the bike path. One dark-eyed junco calls from the south bank pine trees. Two mallards land on the gabion peninsula near the tide gates. Four northern rough-winged swallows circle the West Basin. The Allen's hummingbird nest is unoccupied.

1:20 pm. The biological monitor and most crew members return from lunch. Work continues installing the east fence along the bike path. The female Allen's hummingbird is observed on her nest. Three house finches, three mourning doves, and one house sparrow are observed along the west bank. One double-crested cormorant is fishing in the West Basin. Water levels have dropped significantly since the morning; the mudflats are fully exposed and wading birds are fishing in the middle of the East Basin.

1:40 pm. A tractor removes asphalt and other debris from the sidewalk removal work being conducted in Yvonne Burke Park and takes it to the staging area. The sidewalk will be replaced with new asphalt in the near future. Potted plants are staged along the south bank for future planting. One European starling and two house finches perch on the south fence. Two killdeer are observed on the north mudflat. One dark-eyed junco and two house finches are observed in the large ficus above the sidewalk removal work.

2:00 pm. A mini excavator is used to excavate the route the new DG path curb will follow. The electrical crew installs light fixtures in the southeast corner along the bike path. Two northern rough-winged swallows dart back and forth across the southeast channel. One Anna's

hummingbird, one song sparrow, and two American crows are observed in trees near the pump house. One monarch butterfly flies north along the bike path.

2:25 pm. Lower water levels expose large amounts of submerged aquatic vegetation and attached algae in the southeast channel. One Caspian tern circles the East Basin twice before leaving towards the marina. A great egret catches a large fish in the Central Basin and flies to the gabion peninsula to consume it.

2:45 pm. Crews start putting the perimeter fence back up along Admiralty Way. Concrete, fence and electrical crews stop work for the day and prepare to leave the site. One Caspian tern lands on the north mudflats and preens, while a great blue heron fishes roughly 20 feet away. Five house finches, three mourning doves, and one European starling are observed on the west bank. The female Allen's hummingbird is observed on her nest.

3:00 pm. Except for some minor planting by hand along the south bank, work in the Basin largely stops for the day. Crews open up the close lane of Admiralty Way and clean up the site.

3:25 pm. Construction crews stop work for the day and prepare to leave the site.

3:35 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

No Osprey, Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

The killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. The nest was located on the southern point of the northwest peninsula about midway between the top and the water level next to a blue ground marker. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.

An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the nest was found last week during a period when work was occurring directly below the tree, the female is very tolerant of nearby activity. Therefore, a nest buffer 25 feet in diameter was established. No work occurred in the vicinity of the nest.

Three monarch butterflies were observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Construction crews planted the south bank near the south bank pine trees.

The crows' nests near the pump house were observed throughout the day with a sighting of a crow in one of them.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. The killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.
4. An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the female is very tolerant of nearby activity, a nest buffer 25 feet in diameter was established.
5. No construction activities occurred in the water.
6. Three monarch butterflies were observed today.
7. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.
8. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler and lesser scaup are being observed less frequently.

Table 1 provides a list of bird species observed during biological monitoring on April 4, 2016.

Table 1. Bird Species Observed during Biological Monitoring on April 4, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Northern Mockingbird	<i>Mimus polyglottos</i>	1 individual observed in a palm along Washington Boulevard
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the mudflats. The killdeer nest is no longer active.
Belted Kingfisher	<i>Megasceryle alcyon</i>	1 individual observed perched on a power line
Caspian Tern	<i>Hydroprogne caspia</i>	1 individual observed on the north mudflat and flying overhead

Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	10 individuals observed flying overhead
Ring-billed Gull	<i>Larus delawarensis</i>	2 individuals observed flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	4-5 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2-3 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	2-3 individuals foraging throughout the Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	3-4 individuals observed foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4 individuals observed flying overhead
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	1 individual observed flying overhead
Tree Swallow	<i>Tachycineta bicolor</i>	2-4 individuals observed flying overhead
Barn Swallow	<i>Hirundo rustica</i>	2 individuals observed circling the West Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	4-6 individuals observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1 individual observed along the south bank
Yellow-rumped Warbler	<i>Setophaga coronata</i>	1 individual observed in trees at the pump house
Townsend's Warbler	<i>Setophaga townsendii</i>	1 individual observed in trees at the pump house
Common Yellowthroat	<i>Geothlypis trichas</i>	1-2 individuals observed along the bike path
Bushtit	<i>Psaltiriparus minimus</i>	6-9 individuals observed in trees along the bike path
Dark-eyed Junco	<i>Junco hyemalis</i>	6-8 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	2-3 individuals observed along the east bank
House Sparrow	<i>Passer domesticus</i>	3-5 individuals observed along the west bank
Song Sparrow	<i>Melospiza melodia</i>	2-3 individuals observed along the bike path
House Wren	<i>Troglodytes aedon</i>	1 individual observed along the bike path
European Starling	<i>Sturnus vulgaris</i>	4-6 individuals observed along Washington Boulevard and the west bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin; one active nest in a pine tree near the tide gates

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The following photographs show important biological monitoring observations:



Figure 1- Female Allen's hummingbird sitting on her nest in the middle of three tide gate pine trees



Figure 2- Nest buffer zone and exclusion tape around the Female Allen's hummingbird nest



Figure 3- Crow with killdeer egg in its beak



Figure 4 – Empty killdeer nest after crows predated the three eggs



Figure 5 – Crews working on installing scaffolding for the new DG path concrete berm along Admiralty Way in the southeast corner of the site.



Figure 6 – Attached algae and submerged aquatic vegetation in the southeast channel



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith

Date: April 5, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on April 5, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 3:40 p.m. Weather conditions were mostly sunny, and temperatures ranged from 58°F in the morning to 73°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the south bank, pouring concrete for the sidewalk in Yvonne Burke Park and curb along Admiralty Way, installing new light fixtures and wiring, installing the finished east fence, grading and rolling structural fill in the northeast plaza, placing asphalt in the gap between the DG path and bike path, constructing the final observation platform, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed and locked, and several crew members sit in cars in the parking lot outside the gate.

6:25 am. The initial biological survey begins as crews move their vehicles inside the staging area. Water levels in the Basin are low, with the mudflats being fully exposed. Two mallards rest on the northwest mudflat. One great blue heron stands on the gabion peninsula near the tide gates, and a black-crowned night heron perches on the tide gate railing. Two northern rough-winged swallows circle the West Basin. Three house finches and two European starlings are observed in palms along

Washington Boulevard. One house sparrow perches on the north fence. A pair of killdeer are observed on the northwest peninsula near their former nest site. One black phoebe perches on the stormwater inlet. One American coot forages in the East Basin. The occasional western gull and American crow flyover is observed. One lesser goldfinch, two orange-crowned warblers, and one Anna's hummingbird are observed along the bike path. Two American crows, one song sparrow, one Anna's hummingbird, and two dark-eyed juncos are observed in trees near the pump house. One great egret, two snowy egrets, and two mallards forage in the southeast channel. One double-crested cormorant lands in the Central Basin, above which two barn swallows circle. One juvenile black-crowned night heron and one male gadwall forage along the south shoreline. One dark-eyed junco calls from the south bank pines. The female Allen's hummingbird is observed on her nest.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Crews were informed that the killdeer nest is no longer active. All 16 crew members present sign the sign-in sheet. One tree swallow circles above the staging area, and two house finches perch atop the construction trailer.

7:10 am. Work begins as crews deploy to the south bank to begin planting and to the east bank to erect the east fence. Crews also sweep the DG path along the bike path. One double-crested cormorant perches on the stormwater inlet. Two dark-eyed juncos hop from branch to branch in the northeast corner pines. One Anna's hummingbird and four bushtits are observed along the bike path.

7:30 am. Crews preparing the gap between the DG path and bike path for asphalt remove debris from the trench. The concrete crew places scaffolding along the Yvonne Burke Park sidewalk for a concrete pour later in the day. The two active crows' nests are observed near the pump house; the work nearby does not disturb the crows. Rock pigeon activity is increasing along Admiralty Way. One great egret and two snowy egrets forage in the southeast channel, roughly 200 feet away from the ongoing work.

7:45 am. The electrical crew installs light fixtures in the southeast corner along the bike path. There is noticeably more floating and attached algae in the Basin itself than was observed yesterday. One peregrine falcon is observed perched on a high rise to the southeast of the site. A third snowy egret lands in the southeast channel.

8:00 am. Concrete crews remove a section of the perimeter fence along Admiralty Way to prepare for the future pour of the concrete curb. Crews deliver boards to the final observation platform on the south bank to complete the deck. Two barn swallows swoop down around the southeast channel. A second great blue heron lands at the north mudflat. One Allen's hummingbird hovers over the East Basin.

8:20 am. Crews prepare the gap between the DG path and bike path with tar for impending asphalt installation. Five American crows probe the east bank. One Cassin's kingbird lands on a power line above the northeast corner of the site.

8:45 am. An electrical crew works on a fuse box at the pump house. A construction crew compacts the fill for the new pump house driveway. A truck delivers asphalt to the northeast corner. One great blue heron leaves the site to the east. One tree swallow flies along the bike path, while one Eurasian collared dove perches on the east fence. Two mourning doves fly over the northeast corner.

9:00 am. Asphalt placement begins at the northeast plaza. One European starling watches the work from atop a nearby light pole. One male mallard lands at the stormwater inlet. One lesser goldfinch and one dark-eyed junco are observed along the bike path.

9:20 am. One Cassin's kingbird lands in a palm tree along Washington Boulevard; three house finches call from palm trees nearby. A double-crested cormorant circles the Central Basin before landing. Two killdeer, presumably the former nesting pair, call from the staging area.

9:45 am. A crew works on finishing the deck of the final observation platform on the south bank. Another crew cuts portions of the existing bike path near the pump house to facilitate asphalt placement. The concrete crew takes lunch to prepare for the future pour. No wildlife is observed in the vicinity of the bike path cutting, presumably because of the noise. One black-crowned night heron perches in the pine near the tide gates, while another stands on the gabion peninsula near the tide gates. The female Allen's hummingbird is observed on her nest.

10:00 am. The installation of the east fence continues, as does the placement of asphalt from north to south along the bike path. The asphalt is placed in the trench using a Bobcat, is spread smooth by hand with shovels, and is compacted with a jumping jack. Two American crows watch the asphalt placement from a nearby power pole. One Anna's hummingbird feeds in a flowering tree along the bike path.

10:20 am. With so much activity occurring along the bike path, fewer songbirds are observed there. House finches, dark-eyed juncos, and hummingbirds appear more tolerant and fly in and out of the area. One Townsend's warbler is observed in trees near the pump house. A group of 2 to 4 barn swallows and two northern rough-winged swallows circle the east bank and East Basin.

10:45 am. The concrete crew returns from lunch and prepares the southeast corner for the concrete pour. Two mallards land at the stormwater inlet; all other ducks and waders are located in the West Basin and Central Basin, away from the work areas. Two yellow-rumped warblers are observed in trees near the pump house. Four bushtits, three house finches, and two common yellowthroats are observed in Yvonne Burke Park.

11:10 am. The electrical crew wires light fixtures along Admiralty Way. A concrete truck arrives at the southeast gate, and the concrete pour of the new sidewalk in Yvonne Burk Park begins. Crews continue planting along the south bank near the south bank pine trees. One monarch butterfly flies across the southeast channel near the pump house. One Caspian tern lands on the north mudflat and preens.

11:30 am. No wildlife is observed in the vicinity of the concrete pour in Yvonne Burke Park. The

Caspian tern circles the Basin several times and dives, unsuccessfully, for fish twice before returning to the north mudflat. One Anna's hummingbird hovers above the pump house, and one great blue heron forages in the southeast channel.

11:50 am. The concrete truck leaves the southeast gate and positions itself along Admiralty Way to pour the DG path curb. The asphalt crew has reached the pump house and installs the new driveway off of the bike path. The planting crew takes lunch. Two house finches, two American crows, and one dark-eyed junco are observed in trees near the pump house.

12:15 pm. Crews take staggered lunches; the biological monitor takes lunch with most of the asphalt crew. The female Allen's hummingbird is observed on her nest. Four American crows and one black-crowned night heron fly over the staging area.

1:00 pm. The biological monitor and asphalt crew members return from lunch. The planting crew continues installing potted plants along the south bank. The Caspian tern circles and dives for fish in the West Basin. Four house finches, two house sparrows, and one Anna's hummingbird are observed along the west bank. One juvenile black-crowned night heron perches on the tide gate railing. Two mallards leave the site to the southwest. One great egret and two great blue herons stand on the gabion peninsula. The female Allen's hummingbird is observed on her nest.

1:20 pm. Concrete crews treat the recently installed curb and sidewalk in the southeast corner. The electrical crew wires light fixtures along Admiralty way, and the asphalt crew continues asphalt placement to the south of the pump house. One Anna's hummingbird, one common yellowthroat, and three American crows are observed in trees near the pump house. One dark-eyed junco and one black phoebe are observed along the southeast channel. Winds begin picking up in intensity.

1:40 pm. Vector Control arrives on site and begins sampling the southeast channel for mosquito larvae. A concrete truck arrives along Admiralty Way to finish the curb pour in the southeast corner. One black-crowned night heron carries nesting material from the pump house off site to the southeast. One house finch flies lower over the southeast channel.

2:00 pm. The concrete truck heads to the staging area for wash out. Crows are frequently observing flying to and from the two nests in trees across the bike path from the pump house. One Anna's hummingbird hovers over the southeast channel outlet, as two mallards land in the channel nearby.

2:20 pm. Crews finish placing asphalt and arrive at the southeast gate. The concrete crew continues treating the curb and sidewalk. The perimeter fence is put up along the bike path in the southeast corner, as two northern rough-winged swallows circle nearby. One dark-eyed junco calls out from the pump house, and two house finches perch on the south fence.

2:35 pm. Grading and rolling of the asphalt in the northeast plaza begins. One great blue heron stands at the end of the gabion peninsula in the Central Basin. One male gadwall forages at the stormwater inlet. Two house finches and two house sparrows are observed in vegetation along the bike path. One Caspian tern circles the West Basin and dives successfully for fish.

3:00 pm. Concrete and electrical crews finish work for the day and prepare to leave the site. Grading and rolling of structural fill in the northeast plaza stops. The remaining activities are planting along the south bank and site clean-up. Three mourning doves fly over the East Basin, and three bushtits are observed in the northeast corner pines. Rock pigeons frequently fly along Admiralty Way.

3:20 pm. Construction crews stop work for the day and prepare to leave the site. The Bobcat is used to clean the DG path and bike path. The female Allen's hummingbird is observed on her nest.

3:40 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

No Osprey, Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Yesterday, the killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.

An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the nest was found last week during a period when work was occurring directly below the tree, the female is very tolerant of nearby activity. Therefore, a nest buffer 25 feet in diameter was established. No work occurred in the vicinity of the nest.

One monarch butterfly was observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Construction crews planted the south bank near the south bank pine trees.

The crows' nests across the bike path near the pump house were observed throughout the day with a sighting of a crow in one of them.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.

2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. The killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.
4. An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the female is very tolerant of nearby activity, a nest buffer 25 feet in diameter was established.
5. No construction activities occurred in the water.
6. One monarch butterfly was observed today.
7. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.
8. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler, ring-billed gulls, and lesser scaup are being observed less frequently.

Table 1 provides a list of bird species observed during biological monitoring on April 5, 2016.

Table 1. Bird Species Observed during Biological Monitoring on April 5, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Cassin's Kingbird	<i>Tyrannus vociferans</i>	1-2 individuals observed along Washington Blvd
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the mudflats. The killdeer nest is no longer active.
Peregrine Falcon	<i>Falco peregrinus</i>	1 individual observed to the southeast of the site
Caspian Tern	<i>Hydroprogne caspia</i>	1 individual observed on the north mudflat and flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	3 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	4-5 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2-3 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4-5 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	1 individual foraging throughout the Basin
American Coot	<i>Fulica americana</i>	1 individual foraging throughout the Basin

Double-crested Cormorant	<i>Phalacrocorax auritus</i>	2-3 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	3-5 individuals observed flying overhead
Eurasian Collared Dove	<i>Streptopelia decaocto</i>	1 individual observed on the east fence
Tree Swallow	<i>Tachycineta bicolor</i>	1-2 individuals observed flying overhead
Barn Swallow	<i>Hirundo rustica</i>	4-6 individuals observed circling above the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	4-6 individuals observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1-2 individuals observed along the south bank and at the stormwater inlet
Yellow-rumped Warbler	<i>Setophaga coronata</i>	2 individuals observed in trees at the pump house
Orange-crowned Warbler	<i>Oreothlypis celata</i>	2 individuals observed in trees at the pump house
Common Yellowthroat	<i>Geothlypis trichas</i>	2-3 individuals observed in the southeast corner
Townsend's Warbler	<i>Setophaga townsendii</i>	1 individual observed in trees at the pump house
Bushtit	<i>Psaltiriparus minimus</i>	7-11 individuals observed in trees along the bike path
Dark-eyed Junco	<i>Junco hyemalis</i>	7-9 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	1-2 individuals observed along the east bank
House Sparrow	<i>Passer domesticus</i>	4 individuals observed along the west bank
Song Sparrow	<i>Melospiza melodia</i>	1 individual observed along the bike path
European Starling	<i>Sturnus vulgaris</i>	2-3 individuals observed along Washington Boulevard and the west bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin; one active nest in a pine tree near the tide gates

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The following photographs show important biological monitoring observations:



Figure 1- Female Allen's hummingbird sitting on her nest in the middle of the three tide gate pine trees



Figure 2- Caspian tern circling the Basin and diving for fish



Figure 3- Asphalt placement in the gap between the DG path and bike path



Figure 4 – Sidewalk replacement outside the southeast gate in Yvonne Burke Park



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith

Date: April 6, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on April 6, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were mostly sunny, with fog and strong winds rolling in during the afternoon. Temperatures ranged from 58°F in the morning to 71°F in the afternoon. No measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the south bank, installing concrete bases and wiring for light fixtures, digging fence post holes and filling them with concrete fence bases, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed and locked, and several crew members sit in cars in the parking lot outside the gate.

6:25 am. The initial biological survey begins as crews move their vehicles inside the staging area. Water levels in the Basin are very low, with the mudflats being fully exposed. Two double-crested cormorants fly over the site; one to the south and one to the west. Frequent western gull flyovers are observed. Two mallards and two killdeer rest on the northwest mudflat. One double-crested cormorant is observed fishing in the West Basin. Two mallards rest on the gabion peninsula near the tide gates. Five house finches and three European starlings are observed in palms along

Washington Boulevard. One American coot and one male gadwall forage in the East Basin. Two house sparrows are observed in the northeast corner, above which perches a Cassin's kingbird on a power pole. One great blue heron forages near the stormwater inlet. One downy woodpecker is observed in the northeast pines. One Allen's hummingbird, two blue-gray gnatcatchers, and four bushtits are observed along the bike path. Three dark-eyed juncos forage along the east bank. Two Anna's hummingbirds, three American crows, and one house finch are observed in trees near the pump house. Two black-crowned night herons, one snowy egret, and one great egret forage in the southeast channel. One black phoebe and one black-crowned night heron are observed along the south shoreline. One juvenile western gull lands on the gabion peninsula. The female Allen's hummingbird is observed on her nest. Four house finches and two tree swallows are observed in the southwest corner of the site.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Crews were informed that the killdeer nest is no longer active. All 9 crew members present sign the sign-in sheet. Rock pigeons frequently fly over the staging area, where several house finches, European starlings, and house sparrows fly from perch to perch.

7:15 am. Work begins as crews deploy to the south bank to begin planting. The female Allen's hummingbird is not on the nest. One black-crowned night heron flies in from the northwest and lands on the tide gates. One Caspian tern lands on the north mudflat. Fish are congregating and surfacing in the West Basin due to the low water levels.

7:30 am. The electric crew begins wiring light fixtures in the southeast corner of the site. One double-crested cormorant leaves the site to the southwest. One dark-eyed junco is observed on the south bank. One Anna's hummingbird hovers above the southeast channel.

7:45 am. Minor plant and irrigation system maintenance activities begin on the east bank. Four black-crowned night herons, one snowy egret, and one great egret stand on the end of the gabion peninsula. One willet forages on the north mudflat. The Caspian tern leaves the site for the marina. Two mallards land near the stormwater inlet.

8:05 am. The fence crew digs fence post holes in the southeast corner along Admiralty Way; one lesser goldfinch is observed nearby. Two Anna's hummingbirds, two American crows, and one dark-eyed junco are observed in trees near the pump house.

8:25 am. One great blue heron leaves the site to the east. A Caspian tern lands on the north mudflats. Killdeer call from the northwest mudflat, and two barn swallows circle the East Basin.

8:45 am. Dense mats of algae and submerged aquatic vegetation (SAV) are observed in the East Basin and southeast channel. One female bufflehead dives for food in the Central Basin. One great blue heron chases another offsite to the southeast.

9:15 am. The electrical crew begins wiring and working on the cement bases of light fixtures along

the bike path. Three northern rough-winged swallows are observed over the west bank where two killdeer are standing and calling out. The Caspian tern circles the West Basin and dives for fish. Four house finches fly over the West Basin.

9:45 am. One western scrub jay perches on a temporary power line above the west bank. One mourning dove perches on the north fence. One gadwall flies north over the West Basin. One osprey flies east-to-west over the Basin and perches atop the large pine next to the tide gates. The female Allen's hummingbird is observed on her nest and does not seem disturbed by the nearby osprey.

10:00 am. Unlike on previous days, most of the wading birds (11 individuals in total) are staying in the Basin until late in the morning. This may be due to the small crew and nature of the construction activities. The osprey circles the West Basin and catches a fish on its first dive. It takes the fish atop a power pole above the northwest peninsula. Below the power pole, two American crows sit and wait for any scraps the osprey may drop. Two double-crested cormorants dry their wings on the northwest mudflat.

10:20 am. The electrical crew installs concrete around the bases of light fixtures along Admiralty Way. Two mourning doves and one barn swallow fly over the southeast channel. Two mallards land at the stormwater inlet. One dark-eyed junco is observed in a south bank pine tree.

10:40 am. A tractor is used to move plants from the main staging area on the west bank to staging and planting areas throughout the Basin. Two dark-eyed juncos are observed along the east bank. Three barn swallows circle the East and Central Basins. Two American crows probe the northeast peninsula. One Caspian tern lands on the north mudflat.

11:00 am. One lane of Admiralty Way is closed to allow the tractor to deliver soil and plants to the south bank. The osprey leaves the site to the southeast. The female Allen's hummingbird is observed on her nest. Observed wildlife activity decreases, except for house finches and house sparrows flying about the west bank and staging area.

11:30 am. The fence crew hand mixes concrete and begins to create bases for the fence poles in the southeast corner along Admiralty Way. Nearby, crews load construction debris into a large front loader along Admiralty Way. The Caspian tern circles the West Basin and dives for fish. Two northern rough-winged swallows circle the Central Basin and momentarily land on the north mudflat. Six American crows fly around the southeast channel.

12:00 pm. Construction crews and the biological monitor take lunch. The female Allen's hummingbird is observed on her nest. A flock of six European starlings are observed in a palm along Washington Boulevard. Two barn swallows circle the East Basin. One monarch butterfly flies east-to-west along the gabion peninsula.

12:45 pm. The biological monitor and asphalt crew members return from lunch. Thick fog rolls in from the coast. Two double-crested cormorants and two killdeer are observed on the northwest mudflat. Two house finches are observed in grape vines on the west bank. One snowy egret leaves

the site to the northwest. One American crow and two house sparrows are observed along the west bank.

1:00 pm. Crews remove construction debris from the southeast corner and take it to the staging area. The electrical crew installs cement bases and wiring for light fixtures along Admiralty Way. A California ground squirrel runs across the tide gates, and startles a black-crowned night heron resting there before disappearing into a burrow underneath the tide gate pine trees. Two mallards and one great egret sleep under the same tide gate pines. The female Allen's hummingbird is observed on her nest.

1:25 pm. A worker waters recent plantings on the south bank. The fence crew installs fence post bases in the southeast corner along Admiralty Way. A third crew cleans debris from around the southeast gate. Two double-crested cormorants land in the Central Basin. Strong winds are keeping most birds and butterflies from taking flight.

1:50 pm. One Allen's hummingbird hovers over the boat ramp, as a monarch butterfly flies along the southeast channel. Two house finches are observed perching on the south fence. One Anna's hummingbird and two American crows are observed in trees near the pump house.

2:10 pm. A crew removes old asphalt and curb at the southeast gate; no wildlife is observed in the vicinity of the work. The electrical crew finishes its work for the day and leaves the site. Two mallards land in the southeast channel. One song sparrow and two house finches are observed along the bike path.

2:30 pm. The fence crew finishes its work for the day and leaves the site. One black-crowned night heron leaves the site to the east. One Caspian tern lands on the northwest mudflat, where a double-crested cormorant and great egret rest.

2:50 pm. Crews put the perimeter fence back up along Admiralty Way and open the closed lane. Seven house finches, three house sparrows, and three European starlings forage in vegetation along the west bank. Wading birds take shelter from the wind on the backside of the gabion peninsula.

3:10 pm. Construction crews stop work for the day and prepare to leave the site. Five double-crested cormorants rest on the north mudflat, while a sixth fishes in the West Basin. One great blue heron is observed fishing on the northwest mudflat, and one egret rests at the tide gates. Two mallards sleep on the gabion peninsula near the tide gates. The Caspian tern leaves the site to the southwest. The female Allen's hummingbird is observed on her nest.

3:30 pm. One orange-crowned warbler is observed foraging in bushes in the staging area. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey was observed perching, fishing and feeding in the West Basin. The osprey spent a total of about one hour on site.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Earlier this week, the killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.

An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the nest was found last week during a period when work was occurring directly below the tree, the female is very tolerant of nearby activity. Therefore, a nest buffer 25 feet in diameter was established. No work occurred in the vicinity of the nest.

Two monarch butterflies were observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Construction crews planted the south bank near the south bank pine trees.

The crows' nests near the pump house were observed throughout the day, with at least one nest being active.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. The killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.
4. An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the female is very tolerant of nearby activity, a nest buffer 25 feet in diameter was established.
5. No construction activities occurred in the water.

6. Two monarch butterflies were observed today. Strong winds in the afternoon likely kept monarchs from taking flight.
7. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.
8. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler, ring-billed gulls, and lesser scaup are being observed less frequently.

Table 1 provides a list of bird species observed during biological monitoring on April 6, 2016.

Table 1. Bird Species Observed during Biological Monitoring on April 6, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Cassin's Kingbird	<i>Tyrannus vociferans</i>	1 individual observed above the north bank
Downy Woodpecker	<i>Picoides pubescens</i>	1 individual observed in the northeast pine tree
Willet	<i>Tringa semipalmata</i>	1 individual observed foraging along the north mudflat
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the mudflats. The killdeer nest is no longer active.
Osprey	<i>Pandion haliaetus</i>	1 individual observed fishing and perching in the West Basin
Caspian Tern	<i>Hydroprogne caspia</i>	1 individual observed on the north mudflats and flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	6-8 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2-3 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	4-6 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	1-2 individuals foraging throughout the Basin and flying overhead
Bufflehead	<i>Bucephala albeola</i>	1 individual foraging in the Central Basin
American Coot	<i>Fulica americana</i>	1 individual foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	6-10 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	2-3 individuals observed flying overhead or perched on fences
Western Scrub-jay	<i>Aphelocoma californica</i>	1 individual observed along the west bank
Tree Swallow	<i>Tachycineta bicolor</i>	2 individuals observed in the southwest corner

Barn Swallow	<i>Hirundo rustica</i>	6-8 individuals observed circling above the Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	3-5 individuals observed flying overhead
Black Phoebe	<i>Sayornis nigricans</i>	1 individual observed along the south bank
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	2 individuals observed along the bike path
Orange-crowned Warbler	<i>Oreothlypis celata</i>	1 individual observed in the staging area
Bushtit	<i>Psaltiriparus minimus</i>	4 individuals observed along the bike path
Dark-eyed Junco	<i>Junco hyemalis</i>	6-8 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
Lesser Goldfinch	<i>Spinus psaltria</i>	1 individual observed in the southeast corner
House Sparrow	<i>Passer domesticus</i>	6-8 individuals observed along the west bank
Song Sparrow	<i>Melospiza melodia</i>	1 individual observed along the bike path
European Starling	<i>Sturnus vulgaris</i>	10-12 individuals observed along Washington Boulevard and the west bank
Anna's Hummingbird	<i>Calypse anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin; one active nest in a pine tree near the tide gates

The following photographs show important biological monitoring observations:



Figure 1- Female Allen's hummingbird sitting on her nest in the middle of the three tide gate pine trees



Figure 2- Osprey catching fish in the Basin and taking its catch to a power pole above the northwest peninsula



Figure 3- California ground squirrel at the tide gates

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Figure 4 – Digging fence post holes in the southeast corner along Admiralty Way



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Matt Petty, CDM Smith*

Date: April 7, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on April 7, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Matt Petty, CDM Smith biologist, beginning at 6:15 am and ending at 2:30 p.m. Weather conditions were mostly cloudy, with moderate, but persistent, rain halting work in the afternoon. Temperatures ranged from 56°F in the morning to 66°F in the afternoon. A total of 0.04 inches of measureable rain was recorded.

During the daily monitoring, the biologist observed activities associated with preparing soils and planting on the south bank, installing concrete bases and wiring for light fixtures, digging fence post holes and filling them with concrete fence bases, installing fence posts around the pump house and southeast corner, grading for the DG path in the southeast corner, shaping the slopes of the southeast channel, installing the atrium drainage system in the northeast corner, covering soil stockpiles for rain, and disposing of construction debris. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed and locked, and several crew members sit in cars in the parking lot outside the gate.

6:25 am. The initial biological survey begins as crews move their vehicles inside the staging area. Water levels in the Basin are very low, with the mudflats being fully exposed. Three snowy egrets and one juvenile western gull forage along the northwest mudflat, as one willet probes the

shoreline nearby. One male gadwall and one American coot forage in the Central Basin. Two black-crowned night herons perch on the gabion peninsula in the Central Basin. Two mallard are observed at the top of bank in the northwest corner. The occasional western gull and American crow flyover is observed. Seven house finches and two European starlings fly among the palms along Washington Boulevard. One northern mockingbird perches atop a light pole in the northeast corner. Two dark-eyed juncos, one house wren, and two Anna's hummingbirds are observed along the bike path. One Townsend's warbler, one American crow, one dark-eyed junco, and one Anna's hummingbird are observed in trees near the pump house. One black-crowned night heron and one black phoebe are observed along the southeast channel. One great blue heron forages along the south shoreline, and two house finches and two American crows perch in the south bank pine trees. Two snowy egrets and two black-crowned night herons perch on the tide gates. One double-crested cormorant fishes in the West Basin. The female Allen's hummingbird is observed on her nest.

6:50 am. The biological monitor gives the bio-awareness training to the construction crew. Emphasis was placed on protection of the nesting Allen's hummingbird, waterfowl, wading birds, and monarch butterflies and keeping the site clean. Crews were reminded that the killdeer nest is no longer active. All 14 crew members present sign the sign-in sheet. One Caspian tern lands on the north mudflat, and one double-crested cormorant lands in the West Basin.

7:10 am. Work begins as crews deploy to the south bank to begin planting. The electrical crew begins installing concrete bases and wiring for light fixtures in the southeast corner. Four tree swallows circle the West Basin and the staging area. Five house finches and three European starlings are observed flying from perch-to-perch in the staging area.

7:25 am. Planting begins on the south bank near the tide gate pines but outside of the Allen's hummingbird nest buffer. Crews load debris from the northeast plaza onto a tractor to be taken to the staging area. One great egret lands on the gabion peninsula near the tide gates. Two killdeer are observed calling from the north mudflat. Two house sparrows hop among vegetation on the north bank. Two mourning doves perch on powerlines above the northeast peninsula. One female mallard hops on an 8-foot wall separating residences from the bike path in the northeast corner and settles into vegetation atop the wall.

7:40 am. The fence crew digs fence post holes near the pump house. Two song sparrows and one Allen's hummingbird are observed in the northeast pines. Three bushtits and two dark-eyed juncos are observed along the bike path. A second Caspian tern circles the Basin and dives for fish, while the first watches from the north mudflat. Three American crows, one common yellowthroat, one blue-gray gnatcatcher, and two house finches are observed in trees near the pump house. One mourning dove perches atop the east fence.

8:00 am. Planting crews focus on installing plants around the observation platforms on the south bank. Low water levels have left the southeast channel choked with algae and submerged aquatic vegetation. The condition extends into the East Basin as well. One Anna's hummingbird hovers over the southeast channel. Rock pigeon activity increases along Admiralty Way.

8:20 am. A large front loader delivers soils to the northeast corner, which are spread by hand along the DG path. Two house finches are observed in a palm above the northeast corner. One great egret and one double-crested cormorant fish near the stormwater inlet. Three American crows probe the east bank, and three European starlings perch atop a power pole over the northeast peninsula.

8:40 am. Crews stop work in the northeast corner and move to the southeast corner to grade and remove debris from the future DG path area. The fence crew digs fence post holes at the southeast gate. Two mallards fly over Yvonne Burke Park. One ring-billed gull flies over the southeast channel. One dark-eyed junco perches in the ficus tree just outside the southeast gate.

9:00 am. A crew installs PVC drainage pipes at the observation platforms on the south bank. Electricians work at the tide gates. The female Allen's hummingbird is observed on her nest.

9:20 am. Crews close one lane of Admiralty Way. The female Allen's hummingbird leaves the nest and crosses Admiralty Way to forage. Three male mallards land in the East Basin. Two killdeer are observed on the gabion peninsula in the Central Basin. Two Eurasian collared doves perch on a power line above the north mudflat.

9:40 am. A crew begins installing irrigation piping around the observation platforms on the south bank. The fence crew installs cement bases in the fence post holes at the pump house. Three barn swallows circle the East Basin. Five American crows and two Anna's hummingbirds are observed flying over the southeast channel. One Cooper's hawk flies south-to-north above the bike path. One dark-eyed junco and one mourning dove perch on a rooftop near the southeast corner of the site.

10:00 am. A mini excavator is moved to the northeast corner and crews begin excavating a trench for the atrium drainage swale. Two blue-gray gnatcatchers are observed in bushes along the bike path. Two house finches perch on the perimeter fence in the southeast corner. Three dark-eyed juncos probe the straw wattles along the southeast channel. One black phoebe and one house finch are observed at the stormwater inlet.

10:20 am. A mini excavator is used to load a dump truck with excess soil and debris in the southeast corner. One Caspian tern leaves the north mudflat and dives for fish in the West Basin. One Allen's hummingbird hovers above the east bank. One Townsend's warbler and three dark-eyed juncos are observed along the bike path.

10:40 am. Crews in the southeast corner work on installing irrigation piping. Two mallards sleep on the southeast channel outlet structure, roughly 100 feet from active work areas. Two northern rough-winged swallows circle above houses to the southeast of the site. Two house finches are observed in the ficus tree outside the southeast gate.

11:00 am. The tide gates are opened and water levels in the Basin begin to rise. One crew member digs holes by hand near the tide gates for cement riser posts. The female Allen's hummingbird leaves the nest as the biological monitor approaches. Three double-crested cormorants bathe off the north mudflat, as a Caspian tern and gadwall watch from close by.

11:25 am. Fence crews continue working on installing fence posts at the pump house. One great blue heron, one snowy egret and one black-crowned night heron are observed at the tide gates. Crow activity associated with nearby nests is observed near the pump house. One Anna's hummingbird and one Townsend's warbler forage in the trees along the bike path. Fish are observed surfacing frequently.

11:45 am. The flow of water entering the Basin through the tide gates increases. Two great blue herons site at the tide gates and pick off fish as they enter the Basin. One willet lands on the northwest mudflat and forages on the rapidly dwindling exposed areas. Three male mallards leave the site to the northwest. The Caspian tern leaves the site to the southwest.

12:00 pm. Construction crews and the biological monitor take lunch. The female Allen's hummingbird is observed on her nest. Two house sparrows, three European starlings, and two house finches are observed along the west bank. Two tree swallows swoop above the staging area.

12:45 pm. The biological monitor and crew members return from lunch. A crew returns to digging holes for cement posts near the tide gates. Three great blue herons are observed near the tide gates; one on the gabion peninsula, the second in the large pine, and the third on the parapet wall. One osprey perches atop the large tide gate pine, roughly ten feet above one of the great blue herons. One snowy egret and one great egret are also observed on the gabion peninsula near the tide gates.

1:00 pm. Crews resume planting on the south bank and the installation of the atrium drainage pipe in the northeast corner. Water levels in the Basin are now very high; all the mudflat areas are covered and silt fence is overtopped in places. A few raindrops fall, but they are not enough to wet the pavement. The female Allen's hummingbird is observed on her nest. Two double-crested cormorants and one gadwall are observed at the stormwater inlet.

1:20 pm. The mini excavator is used to shape the southeast channel slopes, and loads any excess soil and debris into a waiting dump truck at the boat ramp. Two mallards sit on the top of the east bank. Two mourning doves, four bushtits, two dark-eyed juncos, and one Anna's hummingbird are observed along the bike path. One black phoebe, one American coot, and one snowy egret are observed in the southeast channel. A steady rain begins to fall.

1:35 pm. Due to the moderate and steady rain, wildlife activity decreases significantly. Given the volume and duration of the rain, the biological monitor makes the decision to stop work. Crews re-open Admiralty Way to traffic. The tide gates are opened and water begins to flow out of the Basin. The osprey leaves the site to the southeast.

2:00 pm. Work stops on site, except for the shoring and covering with plastic of soil stockpiles in the staging area. One Caspian tern arrives on site and dives for fish in the West Basin. One snowy egret and one great blue heron pick off fish being swept out of the Basin.

2:15 pm. Construction crews stop work for the day and prepare to leave the site.

2:30 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey was observed perching in the West Basin. The osprey spent a total of about one hour on site.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Earlier this week, the killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.

An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the nest was found last week during a period when work was occurring directly below the tree, the female is very tolerant of nearby activity. Therefore, a nest buffer 25 feet in diameter was established. No work occurred in the vicinity of the nest.

No monarch butterflies were observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Construction crews planted the south bank near the south bank pine trees.

The crows' nests across the bike path near the pump house were observed throughout the day, with at least one nest being active.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.

3. The killdeer nest containing three eggs was located by American crows, and the eggs were taken by the crows and consumed. Because no eggs remain at the nest, the killdeer nest is now inactive. Established nest buffers are no longer needed.
4. An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the female is very tolerant of nearby activity, a nest buffer 25 feet in diameter was established.
5. No construction activities occurred in the water.
6. No monarch butterflies were observed today. Weather conditions likely kept monarchs from taking flight.
7. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.
8. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler, ring-billed gulls, and lesser scaup are being observed less frequently.

Table 1 provides a list of bird species observed during biological monitoring on April 7, 2016.

Table 1. Bird Species Observed during Biological Monitoring on April 7, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Northern Mockingbird	<i>Mimus polyglottos</i>	1 individual observed atop a light pole in the northeast corner
Willet	<i>Tringa semipalmata</i>	1 individual observed foraging along the north mudflat
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the mudflats. The killdeer nest is no longer active.
Osprey	<i>Pandion haliaetus</i>	1 individual observed perching in the West Basin
Cooper's Hawk	<i>Accipiter cooperii</i>	1 individual observed flying over the bike path
Caspian Tern	<i>Hydroprogne caspia</i>	2 individuals observed on the north mudflats and flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Ring-billed Gull	<i>Larus delawarensis</i>	1 individual observed flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	5-6 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	4-6 individuals observed throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	3-4 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	6-8 individuals foraging throughout the Basin

Gadwall	<i>Anas strepera</i>	1 individual foraging throughout the Basin
American Coot	<i>Fulica americana</i>	1 individual foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	6-10 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4-6 individuals observed flying overhead or perched on fences
Eurasian-collared Dove	<i>Streptopelia decaocto</i>	2 individuals observed perched on a power line
Tree Swallow	<i>Tachycineta bicolor</i>	4-6 individuals observed above the West Basin
Barn Swallow	<i>Hirundo rustica</i>	3 individuals observed above the East Basin
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	2 individuals observed flying overhead in the southeast corner
Black Phoebe	<i>Sayornis nigricans</i>	1-3 individuals observed in the East Basin
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	2-3 individuals observed along the bike path
Townsend's Warbler	<i>Setophaga townsendi</i>	1-3 individuals observed along the bike path
House Wren	<i>Troglodytes aedon</i>	1 individual observed along the bike path
Bushtit	<i>Psaltiriparus minimus</i>	4-7 individuals observed along the bike path
Dark-eyed Junco	<i>Junco hyemalis</i>	10-12 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
Song Sparrow	<i>Melospiza melodia</i>	2 individuals observed in the northeast pine trees
European Starling	<i>Sturnus vulgaris</i>	8-10 individuals observed along Washington Boulevard and the west bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin; one active nest in a pine tree near the tide gates

The following photographs show important work activities or biological monitoring observations:



Figure 1- Female Allen's hummingbird sitting on her nest in the middle of the three tide gate pine trees



Figure 2- Fence crews installing fence posts near the pump house



Figure 3- The tide gates were opened and water levels inundated the entire northwest mudflat



Figure 4 – Due to the volume and duration of rain, work was stopped for the day and crews covered stockpiles with plastic in the staging area



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Jennifer Jones, CDM Smith
John Ivanov, SWCA Environmental Consultants

Date: April 8, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on April 8, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by John Ivanov, SWCA biologist, beginning at 6:30 am and ending at 3:10p.m. Weather conditions during the day were cloudy skies, with light rain and temperatures ranging from 55°F in the morning to a high of 72°F in the afternoon.

During the daily monitoring, the biologist observed activities associated with planting, grading, compacting of soil, and irrigation installation. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:30 am. The Biological monitor arrives on site.

6:40 am. Initial Biological Assessment begins. Wildlife observed utilizing the Basin upon arrival of the biologist include a House Finch, two Great Egrets, two Mallards, a European Starling, a Black-crowned Night Heron, a Caspian Tern, a Snowy Egret, and an American Crow.

6:55 am. The biological monitor gives the bio-awareness training to the crew totaling eight workers. Trainings and safety tailboards are completed. Crew begins prepping for grading, planting, and drainage throughout site.

7:00 am. Crew begins working along the south side of Basin working on the irrigation system. Three Gadwall dabble in the Basin while a Rock Pigeon and three Western Gulls fly overhead.

7:27 am. Grading and planting begin along the south side of Basin; four Snowy Egrets and an American Coot feed in the Basin and a Cassin's Kingbird is observed calling.

7:50 am. The crews continue grading and planting along the south side of Basin using hand tools. One American Crow, six House Finches, a Mourning Dove, and a Eurasian Collared Dove are observed flying overhead.

8:13 am. The crew works on fencing along northern side of Basin. A Caspian Tern begins hunting over the Basin while a Double-crested Cormorant fishes in the Basin. A Killdeer is present at the northwest corner of the Basin.

8:40 am. Crews compact dirt on the north side of the Basin using a handheld machine.

9:05 am. Planting continues while minor work on the pedestrian path begins along Admiralty Way.

9:35 am. Three Lesser Scaup, and three Black-crowned Night Herons utilize the basin while fifteen Cedar Waxwings fly overhead.

10:00 am. The biological monitor walks the diversion berm and notes that all of the vegetation on the berm is flourishing. Some nonnative mustards and grasses are also observed on the berm.

10:20 am. Planting continues along the south side of Basin. A small bulldozer is used to grade the pedestrian path at the south west corner of the Basin. A Willet and a California Gull utilize the Basin.

10:43 am. Light rain begins; the crew prepares the work yard for rain by covering any dirt mounds with plastic and by cleaning up the work areas.

11:04 am. The crew continues preparing the yard for rain by using a backhoe to pile dirt. Preparation for rain continues throughout the site. The lane closed for construction on Admiralty Way is opened to avoid congestion if the rain increases.

11:25 am. A Great-blue Heron is observed hunting within the Basin. The biological monitor checks the status of the Allen's Hummingbird nest and confirms that the Allen's Hummingbird is on the nest in the pines along the southern edge of the site.

11:48 am. The crew uses a backhoe and shovels to grade the slopes at the east end of the Basin. An Orange-crowned Warbler is heard singing nearby.

12:03 pm. Crews break for lunch.

1:00 pm. The crew resumes planting along southern bank of the Basin. One Osprey is observed flying overhead.

1:20 pm. Crews remove dirt and grade the slopes at the easternmost inlet using a dump truck, bulldozer, and backhoe. The crew piles any excess dirt in the work yard. Three Double-crested Cormorants are observed fishing in the Basin.

1:47 pm. The crew clears lines of the irrigation system along the southern edge of the Basin using an air compressor. Minor grading is conducted on the northern bank of the Basin.

2:10 pm. Preparations for rain continue. Dirt piles are covered with plastic and workspaces are cleaned.

2:30 pm. Crews begin exiting the work areas and help prepare for rain in the work yard. A few crew members leave for the day.

3:00 pm. Most of the crew has left by 3:10pm; the remainder exits worksite not long after.

Additional Observations

One osprey was observed briefly flying over the Basin.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest, and is very tolerant of nearby activity. No worked occurred in the vicinity of the nest.

No monarch butterflies were observed today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

Construction crews planted the south bank near the south bank pine trees.

The crows' nests across the bike path near the pump house were observed throughout the day, with at least one nest being active.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away

from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.

2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. An Allen's hummingbird nest is located in the second pine from the tide gate. The female is occasionally observed on the nest. Since the female is very tolerant of nearby activity, a nest buffer 25 feet in diameter was established.
4. No construction activities occurred in the water.
5. No monarch butterflies were observed today. Weather conditions likely kept monarchs from taking flight.
6. The number of fish surfacing and caught by cormorants and wading birds confirm that fish are entering the Basin through the tide gates.
7. Summer resident species including swallows are being observed more frequently and winter resident species such as the yellow-rumped warbler, ring-billed gulls, and lesser scaup are being observed less frequently.

Table 1 provides a list of bird species observed during biological monitoring on April 8, 2016.

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Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Northern Mockingbird	<i>Mimus polyglottos</i>	1 individual observed along Washington
Willet	<i>Tringa semipalmata</i>	1 individual observed foraging along the north mudflat
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the mudflats. The killdeer nest is no longer active.
Osprey	<i>Pandion haliaetus</i>	1 individual observed flying over Basin
Caspian Tern	<i>Hydroprogne caspia</i>	2 individuals observed on the north mudflats and flying overhead
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
Ring-billed Gull	<i>Larus delawarensis</i>	1 individual observed flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	5-6 individuals foraging throughout the Basin
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	4-6 individuals observed throughout the Basin

Great Blue Heron	<i>Ardea herodias</i>	3-4 individuals observed throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	6-8 individuals foraging throughout the Basin
Gadwall	<i>Anas strepera</i>	1 individual foraging throughout the Basin
Lesser Scaup	<i>Aythya affinis</i>	3 individuals observed throughout the Basin
American Coot	<i>Fulica americana</i>	1 individual foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	6-10 individuals observed foraging in the Basin and flying overhead
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	4-6 individuals observed flying overhead or perched on fences
Eurasian-collared Dove	<i>Streptopelia decaocto</i>	2 individuals observed perched on a power line
Black Phoebe	<i>Sayornis nigricans</i>	1-3 individuals observed in the East Basin
Orange-crowned Warbler	<i>Oreothlypis celata</i>	1 individual observed near East Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	4-6 individuals observed along the north and west banks
European Starling	<i>Sturnus vulgaris</i>	8-10 individuals observed along Washington Boulevard and the west bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	2-3 individuals observed throughout the Basin; one active nest in a pine tree near the tide gates

Mr. Rick Sun
April 8, 2016
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The following photographs show important work activities or biological monitoring observations:



Figure 1- Northern pedestrian path looking west.



Figure 2- Berm looking east.